Abstract

An architecture for robot intelligence enables a robot to learn new behaviors and create new behavior sequences autonomously and interact with a dynamically changing environment. Sensory information is mapped onto a

5 Sensory Ego-Sphere (SES) that rapidly identifies important changes in the environment and functions much like short term memory. Behaviors are stored in a DBAM that creates an active map from the robot's current state to a goal state and functions much like long term memory. A dream state converts recent activities stored in the SES and creates or modifies behaviors in the DBAM.